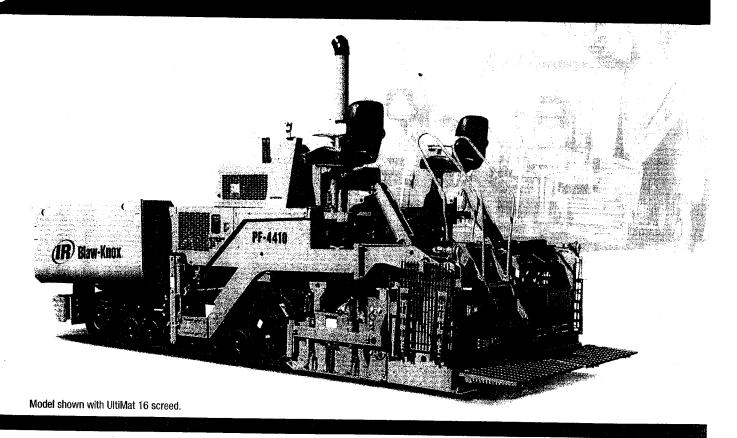
PF-4410 Paver

Ingersoll Rand.



A Productive Paver for Every Application

The PF-4410 is a track-mounted, mid-sized paver / finisher capable of placing bituminous base, binder and surface course mixes, cement or lime stabilized sub-base and graded aggregate materials. New standard features, equipment choices and options offer superior quality control, increased productivity and even greater reliability all while greatly reducing required maintenance time and cost compared to either competitive machines or predecessor models.

KEY FEATURES

- Continuous, Flexible, Hi-Speed, EzRider, Rubber Track the traction and flotation of a track machine with the mobility and rideability of a wheeled machine — smooth track design for improved rideability.
- Positive Cog / Socket Track Drive eliminates the potential power loss associated with friction drive slippage.
- Dual Oscillating Bogie Wheels oscillate front to back and side to side for improved rideability and a more even weight distribution on the track surface.
- Hydraulic Power Tunnels and Baffles (chain curtains) assists the operator in maintaining an even head of the material in front of the screed and quickly accommodates paving widths to 12' 0" (3.66 m) without additional components.
- Maintenance-free Sealed Auger and Conveyor Bearings eliminates daily greasing.
- Durable Curved Hopper rounded configuration of the hopper enhances the flow of hot mix asphalt and makes cleanup quick and easy.
- High-efficiency 16-inch Augers 3/4-inch thick for better delivery and longer wear. Patented power adjustable height 4.5" - 10.5" (115 - 267 mm) permits the operator to quickly adapt to varying job requirements.
- Designed for Easy Maintenance pinned engine hoods and removable deck plates provide convenient access to vital components, filters are easily accessible and a common-platform electrical system is utilized.

PF-4410 Paver

Specifications

ADDITIONAL FEATURES

- Hydrostatic Direct Traction Drive eliminates approximately 70 percent of mechanical drivetrain components.
- Easy Access Electrical Circuit Boards service procedures are faster and easier.
- Counter-rotating Tracks provide superior tight-quartered maneuverability.
- Central Hydraulic Valve Block with Interchangeable Cartridge Valves — speeds service access and simplifies troubleshooting.
- Unitized Rear Feed Section reduces service access time to all major feeder system components by approximately 50 percent.
- The Most Extensive Selection of State-of-the-Art Equipment Options — to automate and improve the end result quality of your HMA paving operation.

OPTIONS / ACCESSORIES

- Additional operator's umbrella
- Auger and auger guard extension kits
- Blaw-Kontrol® II
 - Mechanical Grade Sensor
- UltraEye® V Ultrasonic
 Grade Sensor
- Ultra IV™ Sonic Averaging System
- Mobile Reference Systems

Fnaine	Shutdown	Kit

- Generator set
- Material Indicator Kit
- Material Management Kit
- Light beacon and worklights
- Truck hitch

MODEL		PF-4410
THE PARTISONS ARE	us	METRIC
Basic Screed Width	8'	2.44 m
Max Paving Width	25'	7.62 m
Paving Depth	1/4" - 8"	6.35 - 203.2 mm
Hopper Capacity 8	3.5 t (155 cu ft)	7.7 T (4.39 m³)
Gage Width — Center to Center of Tracks	76.25"	1937 mm
Length of Track on Ground	102"	2591 mm
Track Width	14"	355.6 mm
Travel Height with Exhaust	10' 3-1/4"	3.13 m
Width Hopper Sides Up	8' 2-1/2"	2.50 m
Width — Hopper Sides Down	10' 5"	3.18 m
Length Wedge-Lock Screed	17' 2-3/8"	5.24 m
Length — OmniScreed IA	17' 2-3/8"	5.24 m
Length — UltiMat 16	17' 10"	5.43 m
Brand	Cı	ımmins QSB 5.9-30T
Horsepower @ 2,100 rpm	158 hp	117.8 kW
Electrical System 12\	, negative ground	with 130A alternator
		er e
Paving Speed	242 fpm	73.8 m/min
Travel Speed	8.5 mph	13.7 km/h
Suspension Unitized, bolt-on track frames	6 sets of dual os	cillating bogie wheels

Tractor Only	28,900 lb	13109 kg
With Wedge-Lock Screed	31,500 lb	14288 kg
With Wedge-Lock Screed with 2.5/5 Hyd. Extns		14842 kg
With OmniScreed IA	32,850 lb	14901 kg
With UltiMat 16	35,950 lb	16307 kg
Cooling Capacity	26 qt	25 L
Fuel Capacity Hydraulic Reservoir Capacity	38 gal	144 L
Product improvement is a continuing goal at Ingereall-Pand	40 gal	151 L

Product improvement is a continuing goal at Ingersoll-Rand.

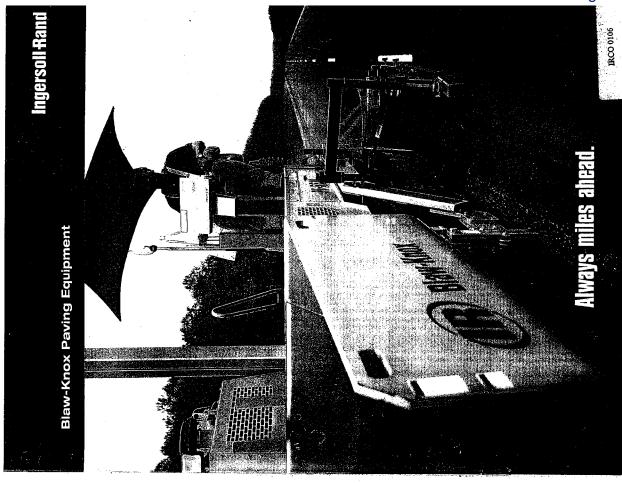
Designs and specifications are subject to change without notice or obligation.

SCREED CHOICES

- **8'** (2.44 m) Wedge-Lock® Screed with optional modular extensions to extend paving width up to a standard maximum of 25' 0" (7.62 m). Heating choices of diesel, propane or electric available.
- **8'** (2.44 m) Wedge-Lock Screed with 2.5/5 Hydraulic Extensions to extend paving width up to a maximum of 13' 0" (3.96 m). Optional modular extensions for the telescoping sections will increase the maximum paving width to 15' 0" (4.57 m). Heating choices of diesel, propane or electric available. Hydraulic extensions are not equipped with heat and vibration.
- 8' (2.44 m) Power Extendible OmniScreed* IA with a maximum, fully screeded, extended paving width of 13' 1-1/2" (4.00 m). Optional modular Wedge-Lock extensions will increase the paving width to 17' 2" (5.23 m), diesel heated.
- **8'** (2.44 m) Power Extendible UltiMat® 16 Screed with a maximum extended paving width of 16' 0" (4.88 m). Optional modular extensions will increase the maximum paving width to 18' 0" (5.49 m).
 - Equipped with a patented, high-efficiency electric heating system
 - Four heating zones for even distribution
 - Temperature control automatically maintained by a patented Energy Management System



Page 2 of 8





More than a line of pavers, a lineage of pavers, baving an incorporate of the pavers o

Blaw-Knox pavers from Ingersoil-Rand are a breed apart. They're the only pavers with a 65-year heritage of innovation, a legacy that has produced many industry standards. Today, Blaw-Knox pavers remain the number one choice of professionals. Together with Ingersoil-Rand compactors, they help you achieve maximum productivity in a constantly changing industry. With millions of miles behind us, count on Ingersoil-Rand to keep you miles ahead.





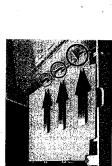
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No other pavers blend innovation and simplicity as smoothly as Blaw-Knox.

You want an advanced paver capable of meeting today's contradictory demands. Every paver in our Blaw-Knox^m challenges. But, you also want a reliable machine that systems, an unmatched selection of screeds and the and operator-friendly controls. Whichever Blaw-Knox you choose, technology and simplicity are both part won't let you down. At Ingersoil-Rand, those aren't keep-it-simple approach. You'll find superior drive low-maintenance components, rugged construction line combines state-of-the-art engineering with a industry's most accurate automation, along with

Rep-1-simple approac State-of-the-art enginee



Clamp-in conveyor floor plates cut replacement time in half,

clamp-in design protects the bolts from the elements. This improvement has reduced Exclusive to Blaw-Knox 10-foot pavers conveyor floor plates are a vastly supe alternative to traditional bolt-in designs Unlike bolt-in plates, which continually expose the bolts to asphalt material, and the 8-foot PF-2181, clamp-in replacement time by 50 percent.



baffles (chain curtains) assist the operator in Hydraulic power tunnels and containment with a steady flow of material and a steady in front of the screed. This, in conjunction maintaining an even head of material offer greater material control. Power tunnels and baffles

paving speed, will produce a smoother, more

homogenous mat. Tunnels and baffles will minimizing the forward roll and intrusion of material. Optional on wheeled pavers.

also protect the undercamage of the paver



ience and contro

The entire rear-feeder section can simply and quickly be detached for maintenance or repairs. This feature provides access of the tractor, and significantly reduces to both the feed system and the rear

Unitized rear-feed section detaches for service ease,

Dual consoles facilitate operation from machines utilize dual operator stations and the 8-foot PF-2181, allow the oprtilized on all Blaw-Knox 10-foot par either side...Other Blaw-Knox 8-foot wo fully equipped control stations, work safely with the best visibility with a swing control console.





ction over a wide range. efficiency augers

substantial in the industry — for better delivery and longer wear. Patented power-adjustable height permits the Blaw-Knox pavers are equipped with 3/4-inch thick augers — the most operator to quickly adapt to varying



Only Blaw-Knox offers maintenance-free, perform every night, you can run longe sealed auger and conveyor bearings. With one less maintenance task to and be more productive each day. Sealed bearings also eliminate the potential of failure from improper Sealed bearings keep



quick and easy. A continuous flow of mix helps minimize heat loss.

The rounded configuration of the hopper enhances the flow of hot mix asphalt and makes cleanup

design maintains the flow Durable curved-hopper

Blaw-Knox track pavers thrive under a variety of conditions. On soft bases, the positive cog-drive system and flexible rubber track provide a clear advantage. Where others slip, they grip, with far less vulnerability to debris than friction systems. Track drive also offers better flotation over thin and thick spots without disturbing the surface, and superior traction on significant uphill and downhill grades. Versatile, multipurpose machines, Blaw-Knox track pavers keep your production on course.

Parts commonality keeps pavers in service. Blaw-Knox pavers are engineered with

a high degree of parts commonality Ninety percent of the wear parts on 10-foot pavers, and 75 percent on 8-foot models, are common to other Blanch Character in their class.

The parts of the composition of the

Operator-controlled flow gates meter Adjustable flow gates maintain a uniform head of material.

the amount of mix to the augers. Conveyor and auger systems are linked to assure uniform delivery of material

cog / socket drive. It eliminates the potential flexible, molded rubber track with a positive associated with friction drive slippage.
The high-tensile strength track is protected by the longest warranty in the industry. Blaw-Knox patented system combines power loss and steering control issues

the contour of the base. Taken as a whole, the undercarriage produces exceptional rideability, for high levels of comfort and productivity, and the entire track length to flex and conform to

Baw-Knox track adjustment system tensions Getting the most life out of a paver's tracks is crucial to maximum productivity. The the track automatically. In addition, the track can be manually realigned without

removing the tracks from the machine.

IRCO 0108

PF-4410 every paving application.

Engine Brand	Cummins QSB 5.9-30T	Cummins OSB 5.9-30TAA
Engine tip @ rpm (kW)	158 @ 2,100 (117.8)	188 @ 2.100 (140.2)
Paving Speed fpm (m/min)	242 (73.8)	230 (70.1)
Trave! Speed mph (km/h)	8.5 (13.7)	10 (16.1)
Basic Screed Width ft (m)	8 (2.44)	10 (3.05)
Max Paving Width ft (m)	25 (7.62)	30 (9.14)
Paving Depth in (mm)	1/4 (6.35) - 8 (203.2)	1/4 (6.35) - 12 (304,8)
Hopper Capacity cu ft (m²)	155 (4.39)	218 (6.17)
Overall Travel Length w/ Screed*ff (m)	17' 10' (5.43)	21.1*(6.43)
Overall Travel Height w/ Exhaust ft (m)	10' 3-1/4" (3.13)	9' 7" (2.92)
Width (hopper wings in) ft (m)	8' 2-1/2' (2.5)	10 (3.05)
Width (hopper wings out) it (m)	10' 5" (3.18)	10' 4" (3.15)
Length of Track on Ground in (cm)	102 (259.1)	117 (297.2)
Weight w/ Screed* Ib (kg)	35,950 (16307)	40,965 (18851)

*Ask distributor for configuration options. Measurements (approx.) represent machine with heaviest screed.

The paving industry is evolving. Maneuver through its changes with ease on the strength of Blaw-Knox wheeled pavers. They offer all the speed, mobility and efficiency you would expect from the company that developed and introduced an effective and reliable, pneumatic-tire paver in 1954. An excellent machine for both highwayown and operate. No wonder they're known as the workhorse of the industry. and commercial-class jobs, Blaw-Knox wheeled pavers are economical to

The undercarriage design of a wheeled paver requires less maintenance over the long haul. Less maintenance means reduced operating costs.

Low service requirements save time and money.

Adjustable flow gates maintain a uniform head of material.

Like all Biaw-Knox pavers, our wheeled models are specifically designed for easy service. Pinned engine hoods and deck

Designed for easy maintenance.

Hydraulic valves, with manual overrides, are consolidated into monoblock units for quick diagnostics and service. A common-platform electrical system is utilized, plates provide convenient access to vital components.

and all filters are easily accessible.

Operator-controlled flow gates meter the amount of mix to the augers. Conveyor and auger systems are linked to assure uniform delivery of material.

Blaw-Knox pavers are engineered with a high degree of parts commonality. parts you need most frequently are in 8-foot models, are common to other Blaw-Knox pavers in their class. The Ninety percent of the wear parts on 10-foot pavers, and 75 percent on stock to keep you paving.

keeps pavers in service.

Blaw-Knox is the only manufacturer to specify low-pressure drive tires. Long-standing experience Low-pressure tires improve flotation.

tootprint, for better flotation and traction. The paver can maneuver more readily over soft bases and / or heavy tack coats than it could with lug or tread tires has shown that low-pressure tires provide a larger

An Ingersoll-Rand paver for every paving application	ver for every paving	application.	
MODEL	PF-150	. PF-161	PF-2181
Engine Brand	Deutz F3L912	Cummns Elite 4BTA 3.9	Cummins QSB 5.9-30
Engine hp @.cpm (kW)	47 @ 2,300 (35.0)	107 @ 2,100 (79.8)	158 @ 2,100 (117.8
Paving Speed fpm (m/min)	134 (40.8)	196 (59.7)	260 (79.2)

PF-3172

					0000
Engine Brand	Deutz F3L912	Cummns Elite 48TA 3.9	Cummins QSB 5.9-30T	Currmins QSB 5.9-30T	Cummins QSB 5.9-30TAA
Engine hp @rpm (kW)	47 @ 2,300 (35.0)	107 @ 2,100 (79.8)	158 @ 2,100 (117.8)	158 @ 2,100 (117.8)	188 @ 2.100 (140.2)
Paving Speed fpm (m/min)	134 (40.8)	196 (59.7)	260 (79.2)	227 (69.2)	269 (82.0)
Travel Speed riph (km/h)	11.6 (18.7)	9.9 (15.9)	8.5 (13.7)	9.8 (15.8)	10.9 (17.5)
Basic Screed Width ft (m)	8 (2.44)	8 (2.44)	8 (2.44)	10 (3.05)	10 (3.05)
Max Paving Width ft (m)	13 (3.96)	19 (5.79)	21 (8.4)	21 (6.4)	30 (914)
Paving Depth in (mm)	1/4 (6.35) - 12 (304.8)	/4 (6.35) - 12 (304.8) 1/4 (6.35) - 12 (304.8)	1/4 (6.35) - 12 (304.8)	1/4 (6.35) - 12 (304.8) 1/4 (6.35) - 12 (304.8) 1/4 (6.35) - 12 (304.8)	1/4 (6.35) - 12 (304.8)
Hopper Capacity cu ft (m²)	107 (3.03)	181 (5.13)	182 (5.15)	182 (5.15)	225 (6.37)
Overall Travel Length w/ Screed* ff (m)	15' 3" (4.65)	17.8-38" (5.39)	21.4*(6.50)	21.4 (6.50)	77.5:(6.83)
Overall Travel Height w/ Exhaust ff (m)	9' 9' (2.97)	10 (3.05)	10' 4' (3.15)	10' 4' (3.15)	10' 4' (3.15)
Width (happer wings in) ft (m)	8 2-1/4 (2.5)	8' 2-1/2' (2.5)	8' 2-1/2' (2.5)	10 (3.05)	10 (3.05)
Width (hopper wings out) ft (m)	10' 5' (3.18)	10' 5" (3.18)	10' 4' (3.15)	10' 4" (3.15)	10' 4" (3.15)
Wheelbase in (cm)	84 (213.4)	75 (190.5)	89 (226.1)	90 (228.6)	109 (276.9)
Weight w/ Screed* Ib (kg)	15,290 (6935)	24,300 (11022)	32,000 (14515)	33,330 (15118)	36,715 (16654)

Only Blaw-Knox utilizes offset front bogie

Offset bogie front suspension spreads the load.

arrangements. The paver keeps its pace the weight of the front and more evenly wheels. This unique design distributes for better traction than conventional

even on difficult terrain.

*Ask distributor for configuration options. Measurements (approx.) represent machine with heaviest screed.

IRCO 0109

· Automatically controls both the on / off action and infinitely variable operating speed of the auger systems

Ultrasonic sensors monitor the volume of material and actuate the feeder drives as necessary

Maintains a proper head of material to lay a smooth mat

Wat Kontrol® II with Uitra 3st Sensors.

Non-contact Ultra 3* Sensors are more accurate than paddle sensors and less susceptible to damage, heat and interference

Blaw-Knox screeus

The quality of the finished job is largely determined by the performance of the screed. So much depends on it — laying and sealing a smooth mat, beginning the compaction process, producing tight joints and establishing grade and slope. That's why contractors choose Blaw-Knox screeds to produce the highest quality lift after lift. Our complete line is unmatched for selection and performance. And, every screed is engineered to function as one with Blaw-Knox tractors for maximum simplicity and efficiency.

Resolution is between .005 inches and .020 inches in grade and .010 percent of slope

Grade referencing with either mechanical or ultrasonic grade sensors

Now in its seventh generation since being developed by Blaw-Knox

Slaw-Kontrol® II.

Automatically maintains the grade and slope of the finished mat

The widest range of screeds and opportunities.

- Wedge-Lock* screeds offer the choice of diesel, propane or electric heaters
- Power-extendable OmniScreed VII screeds provide diesel or propane heat options Power-extendable OrnniScreed* IA and OrnniScreed III screeds are diesel-heated
- UltiMat* screed (shown here)
 Equipped with a patented, high-efficiency electric heating system
 - Four heating zones for even distribution

Temperature control automatically maintained by a patented Energy Management System

8-foot and 10-foot basic screed widths

Screed types increase

 Front or rear-mounted extensions Hydraulic paving extension kits up to 30 feet Maximum flexibility to take on all kinds of paving projects

Four non-contact sensors provide a portable and easily maneuverable atternative to the floating beam assembly Sonic averaging beams near front and rear of the paver instantaneously record the distance from the reference surface Data is averaged and actuates the tow point cylinders to produce a smooth mat Ultra IV** Sonic Averaging System.

UltraEye® V Ultrasonic Grade Sensor.

- An optional sensor head that averages a series of signals and is directly interchangeable with the standard mechanical grade sensor
 - Provides a non-contact reference with an accuracy of .020 inches in grade
- Can sense off the existing grade, an adjacent mat or curb, a string line or off a mobile reference

- UltiMat

Blaw-Knox automation opti

Replaceable alloy screed piates iast twice as long.

Control screed functions from mobile locations

 Control of screed tow-point / angle of attack, auger / conveyor override and screed extension / retraction Removable remote location controllers with extendable coil cords Remote control for operator flexibility.

- Both main and extendible screed sections equipped with one-piece, bolt-on replaceable
 - QT 400 alloy steel, they offer up to twice the service life of alternative AR steel plates
 - Maintains mat smoothness, with less downtime for replacement

more important than ever. To help ensure exceptionally high quality, Blaw-Knox offers the With DOTs, municipalities and others moving to results-based specifications, accuracy is most accurate leveling system for an asphalt paver in the industry, along with an array of optional, advanced automation controls. The goal for contractors is to be paid for every ton of asphalt laid. When compensation is determined by fractions of an inch, rely on Blaw-Knox automation to achieve precise results.

IRCO 0110

IRCO 0111

Paving equipment is just the beginning at Ingersoll-Rand. We're committed to you for the long haul with an industry-leading support system. It will keep you up and running for as long as

It all starts with your distributor, who's dedicated to the business of asphalt paving and provides you with an invaluable source for product information, training, technical service bulletins, service and parts. Among other elements of the Ingersoll-Rand support network:

paving operations.

distributor with troubleshooting expertise on difficult service problems.

12-month / 1,000-hour warranty on both large and Standard warranty

Retrofit packages and improvements are designed to Product upgrades

process can quickly make your business plans a reality. individual business needs offered through your dealer. Our streamlined loan application and credit approval Financing and leasing options tailored to meet your Financial solutions

Purchasing paving equipment is an investment. Service and support from Ingersolf-Rand protects the value of your

You're not just buying a powerful piece of equipment. You're investing in the strength of Ingersoll-Rand and its people. From engineers to factory technicians, from field representatives to your distributor, realize maximum value job-after-job, day-after-day. Wherever you see a piece of Ingersoll-Rand equipment, you'll know that they support your purchase and are committed to helping you all of Ingersoll-Rand is behind it.



Take your company to the next level of productivity with a Blaw-Knox MC-330 material transfer

More ways

Material Transfer Device

device. Stationed in front of your paver, its 30-ton capacity provides a mobile and continuous

supply of HMA. A material transfer device eliminates the start / stop cycle and downtime

additional mixing in the hopper insert helps re-blend the material. An optional swing conveyor provides flexibility while working in offset paving applications, increasing the storage capacity

associated with truck transfers. The large mass of material onboard minimizes heat loss and

actually pave at a slower pace for improved quality, and increase production, within the same of the unit. Field experience has shown that a contractor using a material transfer device can

time frame. The payback is tangible: contractors can achieve better quality in less time, with

increased production profitability.

you own ingersoll-Rand equipment.

Factory-sponsored training in all aspects of asphalf **Road Institute**

Regionally located representatives who support your Field service representatives

Factory technical support

Available at each Ingersoil-Rand manufacturing plant for all product lines.

Distributor stocking program for frequently used parts Expanded and expedited parts delivery and express availability for other parts.

small paving equipment. Optional extended warranty packages are available.

keep older equipment productive.

streamline their shoulder operations.

highways with shoulders. A superior alternative to the grader, it places precisely the right amount of material on the shoulder with no waste of product or time. For the ultimate in road widener can be an indispensable tool to the contractor who paves rural roads or

efficiency, the road widener also grades and slopes the shoulder at speed. As a market leader manufacturer, Blaw-Knox offers this speciatry tool to contractors who want to